

# Some historic aspects of money... Money, History & Energy Accounting

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The Technocracy Technate design uses energy accounting as the viable alternative to the current Price System. [Energy Accounting-Fezer.](#)

## The Emergence of money

The use of [barter](#) like methods may date back to at least 100,000 years ago.

To organize production and to distribute goods and services among their populations, pre-market economies relied on [tradition](#), top-down [command](#), or community cooperation.

Relations of [reciprocity](#) and/or [redistribution](#) substituted for market exchange.

Trading in [red ochre](#) is attested in [Swaziland](#). Shell [jewellery](#) in the form of strung beads also dates back to this period and had the basic attributes needed of [commodity money](#).

In cultures where metal working was unknown... shell or ivory jewellery was the most divisible, easily stored and transportable, relatively scarce, and impossible to counterfeit type of object that could be made into a coveted stylized ornament or trading object.

It is highly unlikely that there were formal markets in 100,000 [B.P.](#) Nevertheless... something akin to our currently used concept of money was useful in frequent transactions of hunter-gatherer cultures, possibly for such things as bride purchase, prostitution, splitting possessions upon death, tribute, obtaining otherwise scarce objects or material, inter-tribal trade in hunting ground rights.. and acquiring handcrafted implements.

All of these transactions suffer from some basic problems of barter — they require an improbable [coincidence of wants](#) or events.

## History of the beginnings of our current system

Sumerian shell money below.



Sumer was a collection of city states around the Lower Tigris and Euphrates rivers in what is now southern Iraq. Each of these cities had individual rulers. The history of Sumer tends to be divided into five periods. They are the Uruk period, which saw the dominance of the city of that same name, the Jemdat Nasr period, the Early Dynastic periods, the Agade period, and the Ur III period - the entire span lasting from

3800 BCE to around 2000 BCE. In addition, there is evidence of the Sumerians in the area both prior to the Uruk period and after the Ur III Dynastic period, but relatively little is known about the former age and the latter time period is most heavily dominated by the Babylonians. [Sumer](#)

The word 'Mesopotamia' is Greek for... between the rivers.

## Before Sumer

**Göbekli Tepe** "Potbelly Hill" is a [Neolithic](#) (stone-age) hilltop sanctuary constructed at the top of a mountain ridge in southeastern Turkey. It is the oldest known human-made monumental structure. The site was most likely erected by hunter gathers (c. 12,000 years ago carbon dating) and has been under excavation since 1994. Together with [Nevalı Çori](#), it

has revolutionized understanding of the Eurasian Neolithic. It is so old that it predates the idea of 'city' settlement by thousands of years. [Göbekli Tepe](#)  
Read more: <http://www.dailymail.co.uk/sciencetech/article>

As farming began around Gobekli, the landscape and climate changed. Trees were chopped down and soil leached away. Plowing and reaping left eroded bare land. What was once a beautiful part of the Fertile Crescent became a land of stress, toil and diminishing returns. The former resource rich area was lost and 'Adam' the hunter was forced out of glorious Eden, 'to til the earth from whence he was taken' - as the Bible put it. The areas resource base crashed.  
So a poetic version of this historic period may have come down to us in myth and story from various sources.

In the book of Genesis, it is indicated that Eden was west of Assyria, and this is where Gobekli is cited. Likewise, biblical Eden is by four rivers, including the Tigris and Euphrates. Gobekli lies between both of those. In Assyrian text, there is mention of a 'Beth Eden' - a house of Eden. That minor kingdom was 50 miles from Gobekli Tepe. Another book of the old testament talks of 'the children of Eden in Theslar', a town in northern Syria, near Gobekli.

The word 'Eden' comes from the Sumerian for 'plain' and Gobekli is located on the plains of Harran.

Thus evidence is persuasive that Gobekli Tepe is a 'temple of Eden', built by people who had enough leisure time to cultivate art, architecture and complex ritual. In time however the traumas of the first large scale agriculturists experiment ruined their lifestyle as it had existed previously and devastated their 'paradise'.

## Sumer

Thousands of years after Gobekli Tepe the places where herders, fishermen and farmers met were the first markets, where goods were traded by [barter](#). This abundance of goods for some... led to the creation of the mother of all *savings accounts*: pottery.

Once there were pots in which to store agricultural goods, **food science** was born. Because agricultural productivity is seasonal, but need is perennial, barley became beer, grapes became wine, wheat became flour and bread... milk became yogurt and cheese.

## Clay tokens and writing



New types of tokens became a union between art and counting that eventually gave birth to writing. See: *How Writing Came About*, Denise Schmandt-Besserat. Or, for a quick introduction, [this article](#).

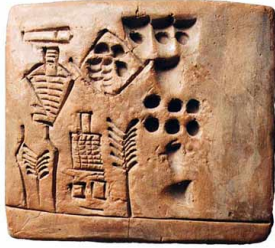
< : (clay tokens, not actual size)... trade tokens that have been found in Iraq, Iran and Syria. Photo: Denise Schmandt-Besserat.

It is actually possible to trace the long road of the invention of the Sumerian writing system. For 5000 years before the appearance of writing in Mesopotamia, there were small clay objects in abstract shapes... clay tokens, that were used for counting agricultural and manufactured goods.

**Three dimensional clay tokens** [pre-cuneiform communication](#).

Already from the 9th millennium onwards **clay tokens** were used to depict objects and abstract numbers and were widely used from present day Sudan to Iran. The clay tokens in various forms and shapes were used as counters (record keeping).

Counters represented e.g. a bull's head, a sheep, a basket, a bar of gold etc. These tokens were, in many cases at least, pictographic ... that is, they depicted concrete objects. They have meaning in any language. Further specification was made with scratches or strokes. It was the first steps towards an abstract notation.



Subsequently, the Mesopotamians stopped using clay tokens altogether, and simply impressed the symbol of the clay tokens on wet clay surfaces. Moreover, instead of repeating the same picture over and over again to represent multiple objects of the same type, they used different kinds of marks to ..count.. the number of objects, thus adding a system for enumerating objects to their incipient system of symbols. Examples of this early system of

[Cuneiform script](#) represents some of the earliest texts found in the Sumerian cities of Uruk and Jamdat Nasr, about 3000 BCE.

## Community *civil society* and technology develop

Communities developed around marketplaces and farming areas. Farming advanced from the cultivation of small plots to the tilling of extensive fields irrigated with canals using the science of [Hydrology](#) management. With the harnessing of the ox, around 3.000 BC, humans began to control and use a motive power other than that furnished by their own muscular energy.



< : Relief of early chariots on the [Standard of Ur](#)

The chariot probably originated in [Mesopotamia](#) before 3000 BC. An early depiction of vehicles (approx. 2500 BC.) is on the Standard of Ur. Commerce could move by [wagons](#) with oxen or [tamed asses](#), before the introduction of horses ca. 2000 BC.

The Sumerians developed an extensive commerce by land and sea. They built seaworthy ships, and they imported from afar items made from the wood, stone, tin and copper not found nearby.

An important invention was the potter's wheel, first used in Sumer soon after 3500 B.C. - Earlier, people had fashioned pots by molding or coiling clay by hand, but now a symmetrical product could be produced in a much shorter time. A pivoted clay disk heavy enough to revolve of its own momentum, the potters wheel has been called one of the first [mechanical devices](#).

The **invention of the wheel** was a major turning point in the advance of human civilization. The wheel led to more efficient use of animal power for agriculture and other work: it became an invaluable mechanical means for controlling the flow and direction of power or force.

About 3100 B.C., metal workers discovered that copper was improved by the addition of tin. The resulting alloy, bronze, was harder than copper and provided a sharper cutting edge. Thus the advent of the civilization in Sumer is associated with the new technology of the [Bronze Age](#), which in time spread to Egypt, Europe and Asia. The Bronze age lasted until about 1200 B.C. when iron weapons and tools began to replace those of bronze.

One of the benefits of community living was a shared [granary](#) into which farmers contributed wheat and barley. If a farmer's crop failed in a given year, they were able to survive on a ration given from a central granary.

Priests controlled most economic activities. Farmers would bring their produce to the the priests at the [Ziggurat](#) temple complex.

The Sumerians developed one of the world's first systems of **monarchy**. The states of Sumer seemed to have been ruled by a type of priest-king, among their duties... leading the military, administering trade, judging disputes, and engaging in the most important religious ceremonies. The priest-king ruled through a series of bureaucrats, many of them priests, that carefully surveyed land, assigned fields, and distributed crops after harvest. Organized religion on a large scale made its first appearance.

A class system developed controlled by rules and regulations eventually written in stone. Sumerian society adhered to a system comprised of three classes: *amelu*, *mushkinu*, and slaves. The *amelu* were at the top rung of the system. Government officials, professional soldiers, and priests were found in this class. Under the *amelu* were the *mushkinu*, the middle class of Sumerian society. The *mushkinu* were comprised of shopkeepers, farmers, merchants, and laborers. The *mushkinu* were the largest of the three classes. Slaves were considered unlucky... but were not particularly looked down on in society as even they had some *legal* rights.

Fully 75% of the records that have been preserved are economic or administrative in nature. Deeds, loans, marriages, inventories, wills, census, and tax matters form the bulk of our knowledge of Sumerian life. [Notes on Sumeria](#).

## **Barter and money**

City life meant a large diversity of goods and services.

Until things are related using a single commodity or set of commodities, it's impossible to provide a uniform pricing metric.

Barley was one such [medium of exchange](#) - by which to figure and compare prices that then set a metric for making purchasing choices across the board of an economy

## **Creative accounting...**

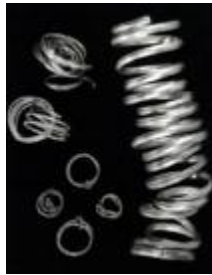
The [Shekel](#) referred to an ancient unit of weight and [currency](#). The first usage of the term came from [Mesopotamia](#) circa [3000 BC](#). and referred to a specific mass of barley which related other values in a [metric](#). The first syllable of the word, 'she' was later [Akkadian](#) for [barley](#).

The language of ancient [Sumer](#), spoken in Southern [Mesopotamia](#) since at least the [4th millennium BC](#). was gradually replaced by [Akkadian](#) as a spoken language in the beginning of the [2nd millennium BC](#), but continued to be used as a sacred, ceremonial, literary and scientific language in Mesopotamia until the first century AD. Then... it was forgotten until the [19th century](#). Sumerian is a [language isolate](#).

A barley/shekel was originally both a unit of currency and a unit of weight... just as the British Pound was originally a unit denominating a one pound mass of silver.

## **The Silver Standard**

## **More on money and culture**



In Mesopotamia, silver - a prized ornamental material that was relatively scarce - became another standard. Supplies didn't vary much from year to year, so its value remained fairly constant, which made it an ideal measuring rod for calculating the value of other things.

Mesopotamians were quick to see the advantage, recording the prices of everything from timber to barley in silver by weight in shekels.

< : silver ring and coil money.

How the citizens of Babylon or Ur actually paid their bills, however, depended on who they were. The richest tenth of the population, frequently paid in various forms of silver. Some lugged around bags or jars containing bits of the precious metal to be placed one at a time on the pan of a scale until they balanced a small carved stone weight in the other pan. Other members of the upper crust favored a more convenient form of cash: pieces of silver cast in standard weights.

The masses in Mesopotamia, however, seldom dealt in such money. It was simply too precious. To pay their bills, water carriers, estate workers, fishers, and farmers relied on more modest forms of money. Copper, tin, lead, and above all, barley. It was the *cheap* commodity money. Barley functioned in ancient Mesopotamia like small change in later systems, like the bronze currencies in the Hellenistic period.

Measurable commodity money such as silver and barley both simplified and complicated daily life. No longer did temple officials have to sweat over how to collect a one-sixth tax increase on a farmer who had paid one ox the previous year. Compound interest on loans was now a breeze to calculate. Shekels of silver, after all, lent themselves perfectly to intricate mathematical manipulation; one historian has suggested that Mesopotamian scribes first arrived at logarithms and exponential values from their calculations of compound interest.

People were constantly falling into debt though. We find reference to this in letters where people are writing to one another about someone in the household who has been seized for securing a debt. To *remedy* these disastrous financial affairs, King [Hammurabi](#) decreed in the eighteenth century B.C. that none of his subjects could be enslaved for more than three years for failing to repay a debt.

## Abstract Values...



< : A Babylonian shekel coin (shown larger)... minted much later under Persian rule (c. 300BCE).

The Sumerian language used the same term for ..interest.. and ..calf..- while the early Egyptian word for ..interest.. also meant ..to give birth.

One lesson learned from the emergence of finance in ancient Mesopotamia is that financial instruments from their very inception could be tools of both enterprise and control. At their best they expanded the realm of Mesopotamian contacts and trade, bringing more choice of consumable items.

At its worst finance became a way for a group of entrepreneurs to exploit the working class mired in debt.





## Religion.. sex.. money & temple prostitutes.

Inanna the famous goddess, first of the earliest known civilization Sumer, then of Babylonia had many other names over the centuries including Great Whore of Babylon, Heavenly Prostitute, and Mother of Harlots as well as Har and Hora, from which the words harlot and whore derive.

Prostitutes called ishtaritu inhabited the temples of Ishtar, offering themselves to any worshipper who paid the required contribution. Money in the form of silver or gold would have added to the coffers of any town from this practice... thus for residents and travelers who possessed a supply of money a *supply* of sex could be had. This trade no doubt made early money popular.

In the [Epic of Gilgamesh](#) a temple prostitute *civilizes* a wild man of the forest by sleeping with him.

The Epic of Gilgamesh recounts the exploits of a heroic ruler of Uruk who lived about 2700 B.C.

One poetic theme of the epic is Gilgamesh's hope for everlasting life... which fails. The ancient Mesopotamians seemed to believe that immortality was reserved for the gods or at least that was the poetic allusion they brought forth in their writing. Reference to an afterlife for humans was made... as a bleak place.

## Asia minor... coins



< : Pictured, a stater coin from Lydia (not actual size).

According to [Herodotus](#), and most modern scholars the Lydians were the first people to introduce the use of gold and silver [Coin](#). It is thought that these first stamped coins were minted

around 650-600 BC. A stater coin was made in the [stater](#) (*trite*) denomination. To complement the stater, fractions were made: the *trite* (third), the *hekte* (sixth), and so forth in lower denominations.

The name of [Croesus](#) of Lydia became synonymous with wealth. Sardis was renowned as a beautiful city. Around 550 BC, Croesus contributed money for the construction of the [temple](#) of [Artemis](#) at [Ephesus](#), one of the [Seven Wonders of the ancient world](#). Croesus was beaten by [Cyrus II of Persia](#) in 546 BC, and the kingdom became a [satrapy](#).

## Greece

The Greek word [Seisachtheia](#) ... or - shaking off of burdens.

[Athens](#) money system was *reformed* by [Solon](#), who *shook off* some former aspects of the Athenian debt structure.

A boom in trade using standardized coins may have helped to set the scene in Athens to experiment with [democracy](#). Special interest representatives made orations of [rhetorical](#)

device for *votes* on various issues, and certain speakers that influenced public opinion became famous citizens, [Pericles](#) being one of the most famous. Democracy worked to a certain degree to empower certain special interest groups ([Delian League](#)) with wealth, status and prestige. Some Athenians became *wealthy* through trade and war.

`` In the case of a word like DEMOCRACY, not only is there no agreed definition, but the attempt to make one is resisted from all sides. It is almost universally felt that when we call a country democratic we are praising it: consequently the defenders of every kind of regime claim that it is a democracy, and fear that they might have to stop using the word if it were tied down to any one meaning. Words of this kind are often used in a consciously dishonest way. That is, the person who uses them has his own private definition, but allows his hearer to think he means something quite different." -[George Orwell](#), [Politics and the English Language](#)

## Conspiracy theory and controlling people with money

Assorted groups attempt to explain the mechanics of money and culture and relate that to *hidden* groups and plots that relate to a variety of [conspiracy theory](#).



From the time periods discussed above and also presently, people have been rewarded in money for what could be viewed as *bad* behavior such as bribery, extortion, rackets, etc.

This has been the case from remote antiquity onwards. Raids and then wars were engaged in to capture women, horses, and slaves... or oil and trade routes or religious shrines or land etc. - The fall back position in a Price System is war.

Money and profit have greased the wheel.

Believers in the [occult](#) offer mysterious explanations for what is usually only simple money reward and punishment and belief system opinion related events. The believers in conspiracy theory connect secret or hidden groups with odd agendas such as taking over or controlling the world using clandestine operations.

There are however no Illuminis entities that organized society to some fantasy belief system purpose.

It is the nature of a political Price System to act in certain negative ways, as a Price Systems main endeavor is to make money above all else, but many people look for more obscure reasons for problems in contemporary society. [I am the Price System !](#)

Nonetheless... today there are multiple groups of various religion and belief systems... many of which do not particularly like each other, but tolerate each other, in their quest to make money and promote various opinions.

These groups make claim to some version or other of ethics or morality, religion or belief system [bigotry](#).



< : The Burney Relief, Terracotta plaque of Inanna-Ishtar or Lilith, c. 2000 BCE

The [Enûma Eliš](#) is an Old Babylonian myth account of creation and the struggle between cosmic order and chaos. It is basically a myth of the cycle of seasons and tries to explain the process of creation and humankind's role in the universe. It was recited on the fourth day of the ancient Babylonian New Year's festival. The basic story exists in various forms from Sumer. Elements of the story stretch back into the myth history of that area. [Mesopotamian Texts Archive](#)

The *Enuma Elish* was considered a serious religious document in society. It could be viewed also as an effective propaganda tool that reinforced civil society constructs and tried to reconcile certain aspects of culture.

It was understood that people have a large capacity to believe in lies... and therefore people were fair game. In other words the money system had built in negative aspects, but also *worked* for better or worse, in that time and place. That is also true in the time and place we live in now. [Origin of the Political/Price System](#).

It is unknown for certain from where the original Sumerian people came from. The threat of floods hung over the Sumerian people always due to the nature of the place in which they lived which was prone to terrible flooding. The concept of a great flood was recorded and passed down in their legends as was the idea of a garden complete with a serpent and a tree. [Gilgamesh and the Huluppu-Tree](#).

Myths and legends combined with written attempts for meaning and control (the invention of contract law), are sometimes an attempt to reconcile hard to reconcile things. Tensions between two groups, hunter gatherers and farmers, created the collision of two ways of life. City dwelling agriculturists, the new group who insisted on taking matters into their own hands, relied upon their growing knowledge and skills rather than on the bounty or lack of bounty of nature.

## The nature of money



All money is decreed money...fiat... whether of silver, gold, paper, barley or shells.

**The *top* says this is money... or else ?**

You Farmer are on the Land owned by the LORD of the land and will pay tribute to the LORD of 1 Gold coin a year...

Where do I get this GOLD coin?





You can take one short ton of grain to the granary of the LORD and there you will be given a GOLD coin for it and then you can give the gold coin to the servant of the LORD...

What if I refuse?

Then the LORD will drive you from the Land that the LORD is the LORD of...

There you go... an abundant supply... of free food to power your wildest hopes and dreams... lies and delusions...

22 And The LORD said, Behold! The man has become as one of Us, to know good and evil. And now, lest he put forth his hand

and also take from the Tree of Life, and eat, and live forever,

23 The LORD sent him out of the garden of Eden to till the ground out of which he was taken.

24 And He drove the man out. And He lodged the cherubs at the east of the Garden of Eden, and the flaming sword whirling around to guard the way of the Tree of Life.

Well... what is done with all that food the tillers of the Lord's land give the LORD as Tribute?

It powers the Political Price System.

The city state... or Civilization...

[TechnateDesignSome-basicfactsTNAT-TheNorthAmericanTechnate.](#)

## **The Technocracy Technate design does not use money. Energy accounting is used instead of a Price System.**

The Technical Alliance defined Technocracy as the scientific social system outlined by the [Technocracy Study Course - excerpted design chapters and links to the complete copy](#)



I'll close this by saying the ancients also had some good advice for us, as in the Epic of Gilgamesh.

Thou, Gilgamesh, Let full be thy belly,  
Of each day make thou a feast of rejoicing-,  
Day and night dance thou and play!  
Let thy garments be sparkling fresh,  
Thy head be washed; bathe thou in water.  
Pay heed to the little one that holds on to thy hand,  
Let thy spouse delight in thy bosom!  
For this is the task of mankind!

[http://docs.google.com/View?docid=dfx7rfr2\\_211crx6c26k\(Money-History & Energy Accounting file\)](http://docs.google.com/View?docid=dfx7rfr2_211crx6c26k(Money-History & Energy Accounting file))

<http://technatedesign-tnat.blogspot.com/>

